

AMENDMENTS TO THE SPECIFICATION

Please insert the following section headings and paragraph beginning at page 1, after the title:

PRIORITY CLAIM

This is a U.S. national stage of application No. PCT/FR03/00909, filed on 21 March 2003, Priority is claimed on that application and on the following application:

Country: France, Application No. 02/03931, Filed 28 March 2002.

The PCT International application was published in the French language.

BACKGROUND OF THE INVENTION

Please replace the paragraph beginning at page 1, line 9 to page 2, line 20, with the following rewritten paragraph:

Such pipes are described in many of the Applicant's patents, for instance patents FR 2 782 141 or FR 2 744 511. They satisfy, inter alia, the American Petroleum Institute Recommended Practice 17B (API 17B). These pipes are formed from an assembly of different layers, each intended to allow the flexible pipe to support the operating or handling ~~constraints~~ requirements, and also specific ~~constraints~~ requirements associated with their offshore use. These layers especially comprise polymer sheaths and reinforcing layers formed from coils of reinforcing wires, of strips or of composite material wires, but it may also comprise coils of various bands between the different reinforcing layers. ~~[[They]]~~ The sheaths more particularly comprise at least one impervious inner sheath or pressure sheath for conveying the transported fluid. ~~[[Said]]~~ That impervious sheath may be the innermost element of the pipe. The ~~[[the]]~~ pipe is then said to be of "smooth bore" type~~[[]] or~~]. Alternatively, the impervious sheath may be arranged around a carcass formed, for example, from a short-pitch coil of a folded-seam strip~~[[(the)]]~~. The pipe is then said to be of the "rough bore" type~~[[]]~~. Reinforcing layers formed from a coil of metallic or composite wires are generally arranged around the pressure sheath and may comprise, for example:

- pressure armoring formed from a short-pitch coil of a folded-seam metallic reinforcing wire, ~~[[said]]~~ the pressure armoring being arranged directly around the impervious sheath so as to take up the radial component of the internal pressure;
- a binding band formed from a short-pitch coil of a non-folded-seam reinforcing wire lying above the pressure armoring to contribute toward the internal pressure resistance, ~~[[said]]~~ the binding band and the pressure armoring forming what is known as a pressure vault;
- laps of tensile armoring formed from long-pitch coils of metallic or composite reinforcing wires, ~~[[said]]~~ the laps being intended to take up the axial component of the internal pressure and also the longitudinal stresses to which the pipe is subjected, for instance the laying forces.

Please replace the paragraph beginning at page 6, line 3, with the following rewritten paragraph:

These elastomeric thermoplastics are generally sought for their ability to be used in methods similar to those used for thermoplastics (extrusion, injection-molding, molding) combined with their elasticity properties or their deformability, which are imparted to them by the elastomer they contain. However, these elastomeric thermoplastics have characteristics that tend to prevent their use in the field of offshore petroleum pipes and more particularly for "dynamic" structures. Thus, they generally show poor resistance to UV exposure and present aging problems under the external environment conditions encountered in the specific offshore application. In their common commercial forms, they may also have an excessively high deformability due to their formulation with a generally large amount of extenders. These extender-rich formulations are unusable in the context of an outer coating for a pipeline especially on account of their high strain combined with large local pressures and axial constraints generated by the tensioners and/or the hanging weight of the flexible pipe during the laying operations.

Please insert the following section heading beginning at page 7, between lines 6 and 7:

Summary of the Invention

Please insert the following section heading beginning at page 8, between lines 7 and 8:

Brief Description of the Drawings

Please replace the paragraph beginning at page 8, line 8, with the following rewritten paragraph:

- Figure 1 diagrammatically represents in perspective a flexible pipe of the invention of a "rough-bore" type and its various layers.

Please replace the paragraph beginning at page 8, line 11, with the following rewritten paragraph:

- Figure 2 diagrammatically represents in perspective a flexible [[type]] pipe of a "smooth-bore" type.

Please insert the following section heading beginning at page 8, between lines 12 and 13:

Description of Preferred Embodiments

Please replace the paragraph beginning at page 11, line 22 to page 12, line 4, with the following rewritten paragraph:

The sheath 7, 8 is advantageously made of an elastomeric thermoplastic polymer ~~that as~~ with a yield point stress σ_s of greater than 10 MPa. This yield point stress will preferably be chosen greater than 20 MPa. This yield point stress depends mainly on the ratio between the thermoplastic block and the elastomer and also on the content of extender present in the

elastomeric thermoplastic polymer formulation. These various ratios will thus be optimized to obtain the required minimum yield point stress.